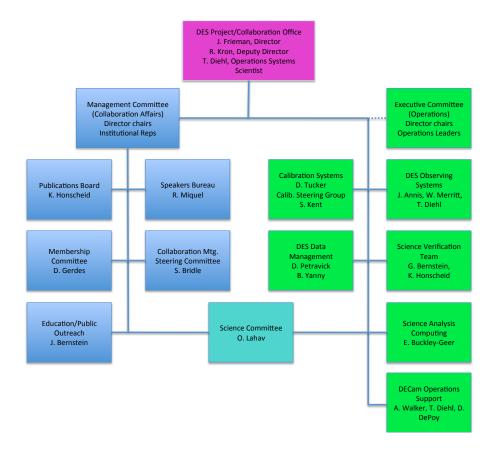
# **DES Organization Chart**

(March 19, 2013, v.8) J. Frieman, R. Kron DES Doc-Db 6588

### Introduction

This document outlines the organization for the Dark Energy Survey Project and Collaboration. It is a snapshot of the organization as it currently exists during DES Science Verification and heading toward early survey operations. Beyond that, we expect the structure, and the roles/responsibilities of individuals within it, to evolve.

The primary organizing principle is the division of the Project/Collaboration into two components: (i) Collaboration Affairs, under the direction of the DES Management Committee, and (ii) Operations, under the DES Executive Committee.



# **Project/Collaboration Office**

The Project Director (J. Frieman), assisted by the Deputy Director (R. Kron), has overall responsibility for the DES Project according to the Fermilab-NOAO-NCSA MOU for the DES. The Director reports to the DOE-NSF Joint Oversight Group (JOG) and to the DES Directors' Council, which represents the Directors of the 3 MOU institutions. The DES Director chairs the Management Committee, which is the main body that manages collaboration affairs and also chairs the Executive Committee, which comprises those in the project with primary operational responsibilities plus the Deputy Director. The DES Operations Systems Scientist (T. Diehl) helps ensure that resources are being optimally applied across the various operations subsystems and serves as the point of contact for and manager of DOE DES operations support. The DES Deputy Director chaired the Systems Interface Working Group (SIWG), an ad hoc group which considered issues that cut across the interfaces of the operational components of the project, providing input and/or recommendations to the Executive Committee as needed and also drafted the DES Project Operation Plan.

# **Management Committee and Collaboration Affairs**

The DES Management Committee helps manage and provide advice to the DES Director on collaboration affairs, and it represents the interests of the DES institutions in the Project. It comprises voting representatives from each of the DES institutions or consortia, plus the DES Director and Deputy Director, plus non-voting members from among the operational systems leaders.

The leaders of the boxes under Collaboration Affairs (Publications Board, Speakers Bureau, Collaboration Meeting Steering Committee, Education/Public Outreach, and the Science Committee) report to, and their appointments are approved by, the Management Committee. The Management Committee approves all institutional and individual members of the DES, all external collaborator requests, and changes to DES policies.

### **Publications Board**

The DES Publications Board (chaired by K. Honscheid) helps manage/supervise the publication of results from the DES. Its responsibilities are specified in the DES Publications Policy (doc-db-2334).

### **Speakers Bureau**

The DES Speakers Bureau (chaired by R. Miquel) helps ensure that DES results are broadly disseminated at conferences and workshops and ensures fair distribution of DES conference presentations across the members of the collaboration, in particular ensuring that early career scientists active in DES get good exposure. Its responsibilities are also specified in the DES Publications Policy (doc-db-2334).

### **Collaboration Meetings Steering Committee**

This committee (chaired by S. Bridle) has primary responsibility for determining the format, cadence, structure, and content of the DES collaboration meetings. It recommends time, location, and format of upcoming collaboration meetings to the Management Committee. Each DES institution or consortium is represented on the committee. Its roles and responsibilities are described in the "DES Meetings Steering Committee" document (in preparation, not yet in doc db).

### **Science Committee**

The Science Committee (SC), comprising the co-coordinators of the Science Working Groups plus the SC chair, is appointed by the Management Committee but also plays a key role in DES Operations, so it is shown linked to both sides of the Org Chart (see below). The SC responsibilities are specified in the Science Committee Charter (<a href="http://www.darkenergysurvey.org/reports/Science Committee Charter\_17\_Jan09.pdf">http://www.darkenergysurvey.org/reports/Science Committee Charter\_17\_Jan09.pdf</a>) and in the Publication Policy. The SC has primary responsibility for ensuring that DES science analyses are carried out and completed in an optimal, collaborative manner. In the near term, a key SC activity is carrying out acceptance testing of DESDM outputs based on SV and early survey data.

#### **Education and Public Outreach**

Education/Public Outreach is a new element in the org chart, and is envisioned as an activity that helps coordinate and expand the on-going efforts in E/PO within the collaboration. This effort will coordinate with the public communications offices at the DES institutions. J. Bernstein has been tentatively identified as the first E/PO coordinator.

## **Executive Committee and Operations**

The Executive Committee serves to bring together the leaders of the 7 DES operational subsystems (Calibration Systems, Observing Systems, Data Management, Science Verification, Science Analysis Computing, DECam Operations Support, and the Science Committee) to form a coherent operations team. It comprises those listed in the operational subsystem boxes on the right hand side of the Org Chart and in the Project Office, plus the CTIO Director ex-officio. Since the operations leaders comprise rather than report to the Executive Committee, it is shown with a dotted line connecting it to the operations boxes.

Note that there is a separate Org Chart for DECam System Operations and Maintenance (Doc-db-6596), which includes DECam operations, DECam maintenance and support, and Community Pipeline operations and maintenance. It has strong overlap with the DECam Operations Support box shown above. This recognizes that there are aspects of instrument operations that formally are not directly tied or responsible to the DES Project, since NOAO operates DECam as a facility instrument for the astronomy community.

### **Calibration Systems**

The DES Calibration Scientist (D. Tucker) has overall responsibility for delivering a system that achieves the photometric calibration requirements embedded in the DES Science Requirements document. The Calibration Systems comprise a number of subsystems:

- Calibration software modules within DESDM
- o PreCAM operations and analysis
- o atmCAM construction, deployment, operation and analysis
- o GPS atmospheric water vapor monitoring system analysis
- DECal operations and analysis
- Standard star tests, star flats, and other special observations

The Calibration Scientist and Project Office receive guidance from the Calibration Systems Steering Group (chaired by S. Kent).

### **DES Observing Systems**

The DES Operations Manager (T. Diehl) and Deputy Manager (W. Merritt) are responsible for coordinating staffing of DES observers and manage the funds for that. This includes ensuring that DES observers are trained and that the observing runs are coordinated by a qualified Run Manager. They also track

the efficiency of DES survey operations in terms of use of useable observing time. The DES Project Scientist (J. Annis) tracks survey completion metrics over time, prepares each semester's DES observing proposal, and recommends modifications to DES survey strategy as necessary. The Project Scientist also has overall responsibility for maintaining the DES Science Requirements and for verifying over the long term that those requirements are being met. The DES Documentation and Training Coordinator (T. Diehl) is responsible for documenting DECam systems for observers and instituting and maintaining training procedures for observers and Run Managers.

### **DES Data Management**

The DES Data Management system is sufficiently complex that it has its own detailed Org Chart for DES DM Formal Production (doc-db-6594), with an associated explanatory narrative. This box includes the effort to develop and as necessary maintain the Community Pipeline. The DESDM project leads are the Principal Investigator (D. Petravick), the DESDM Project Scientist (B. Yanny), and the DESDM Production Scientist (R. Gruendl).

### **Science Verification Team**

The Science Verification (SV) team (led by G. Bernstein and K. Honscheid) is charged with formulating the SV plan, specifying and verifying that DES DM is providing the necessary outputs to carry out SV tests, carrying out the tests during DES Science Verification and Extended SV that will verify that DECam is producing survey-quality data that will meet the DES science requirements. These activities will continue on an as-needed basis, with aspects of these activities morphing into a longer-term Operations Team.

### **Science Committee**

As noted above, the Science Committee comprises the co-coordinators of the DES Science Working Groups, plus the SC Chair (O. Lahav). It is charged with acceptance testing of DESDM, providing input to the DES Science Requirements, developing, testing, and carrying out DES science analyses, and providing input to the DES Project Scientist on DES survey strategy.

### **Science Analysis Computing**

This group (led by Liz Buckley-Geer with Scott Dodelson) is charged with scoping DES computational analysis needs/resources (to turn DESDM outputs into science results) based on inputs from the Science Working Groups, including resources needed for DES-specific simulations, and with formulating and implementing a plan/proposal for optimally distributing those resources across the DES institutions and incorporating national computing resources into the plan.

### **DECam Operations Support**

This box captures all the activities associated with on-going DECam operations support, including DECam and Community Pipeline maintenance,

from the DES Project/Collaboration. It also includes, e.g., the DES efforts to further develop, test, and refine the Focus and Alignment system using donuts and BCAMs. DECam operations are carried out by NOAO/CTIO with support from Fermilab/DES; the NOAO/CTIO Org Chart for DECam Operations is included in the DECam System Operations and Maintenance Plan (doc-db-6274) and in a standalone document (doc-db-6596). The leaders in this box are the NOAO DECam Instrument Scientist (A. Walker), DES Operations Manager (T. Diehl), the DECam Project Scientist (D. DePoy), and the CTIO Director ex-officio (N. van der Bliek).